

tion angle detecting portion 112 detects this position relationship, the image processing circuit 115 generates the image signal suitable to the oblong screen in response to this detection, and the display control portion 114 displays display contents to be displayed on the display portion 11 in the oblong state (or display right and left of the display contents as a long side direction of the display portion 11). In this event, if there is a directivity in the console portion 12 for processing corresponding to operation such as the direction key (cursor key), corresponding processing contents are suitable to the display direction.

[0073] In the state of FIG. 2B or FIG. 2C, confirmation of a large quantity of character information is easily carried out by the oblong display face and it is easy to see when an oblong image is displayed. In the manner which is described above, it is possible for the foldable portable telephone set 10 according to the first embodiment of this invention to see the display in the opened state with the display portion 11 put into the oblong state and to suitably operate as the need arises.

[0074] According to the foldable portable telephone set 10 according to the first embodiment of this invention, the pair of front camera portions 17a and 17b is disposed on the main surface (display face) 32a of the display portion unit 32. The pair of front camera portions 17a and 17b is disposed so as to position right and left when the display portion 11 is put into the oblong state by the rotating and sliding mechanism 40 of the display portion unit 32. As a result, it is possible to easily carry out a deformation into a position suitable to 3D image processing (3D image pickup using the pair of front camera portions 17a and 17b disposed to right and left). The 3D image processing will later be described.

[0075] According to the foldable portable telephone set 10 according to the first embodiment of this invention, the rear camera portion 18 is disposed on the other main surface (the rear face) 32b of the display portion unit 32 as shown in FIG. 2D. It is possible to easily carry out pickup of the oblong image using the rear camera portion 18. Specifically, in prior art, it is necessary to pick up with the apparatus put into a oblong state in a case of carrying out the pickup of the oblong image (in this event, it is necessary to carry out operation with an oblong state). On the contrary, according to the first embodiment of this invention, it is possible to easily carry out the pickup of the oblong image by rotating the display portion unit 32.

[0076] In addition, it is possible to suitably select the pair of front camera portions 17a and 17b and the rear camera portion 18 in accordance with a stop state (an arrangement state) of the display portion unit 32 by arbitrary setting of a user in the manner which will later be described. For example, it is possible to set by operating the console portion 12 so as to operate one front camera portion 17a and the rear camera portion 18 in the state illustrated in FIG. 2A. It is possible to set by operating the console portion 12 so as to operate the pair of front camera portions 17a and 17b in the state illustrated in FIG. 2B. It is possible to set by operating the console portion 12 so as to operate only the rear camera portion 18 in the state illustrated in FIG. 2C. Therefore, it is possible to easily carry out to set a pickup mode (camera selection and allocation of key function accompanied by the camera selection).

[0077] Referring to FIG. 7, description will be made as regards a switching operation of a display mode in accor-

dance with detection of the rotation position of the display portion unit 32 by the rotation angle detecting portion 112. In the example being illustrated, inasmuch as the foldable portable telephone set 10 is provided with the first through the third magnetic sensors 111a-111c, it is possible to switch the display mode into three modes (a mode a, a mode b, and a mode c).

[0078] More specifically, it will be assumed that the display portion 11 is put into the oblong state where the display portion 11 is rotated clockwise CW by 90 degrees, as shown in FIG. 2C. The third magnetic sensor 111c detects this state to produce a magnetic clockwise rotation detected signal which is supplied to the rotation angle detecting portion 112. Responsive to the magnetic clockwise rotation directed signal, the rotation angle detecting portion 112 sends a clockwise rotation detected signal indicating that the display portion 11 is rotated clockwise to the image processing circuit 115 and the camera input/output control circuit 116 (Y in a step A1). Responsive to the clockwise rotation detected signal, the image processing circuit 115 and the camera input/output control circuit 116 set the display mode into the mode a (a step S2).

[0079] It will be assumed that the display portion 11 is put into the oblong state where the display portion 11 is rotated counterclockwise CCW by 90 degrees, as shown in FIG. 2B. The second magnetic sensor 111b detects this state to produce a magnetic counterclockwise rotation detected signal which is supplied to the rotation angle detecting portion 112. Responsive to the magnetic counterclockwise rotation directed signal, the rotation angle detecting portion 112 sends a counterclockwise rotation detected signal indicating that the display portion 11 is rotated counterclockwise to the image processing circuit 115 and the camera input/output control circuit 116 (Y in a step A3). Responsive to the counterclockwise rotation detected signal, the image processing circuit 115 and the camera input/output control circuit 116 set the display mode into the mode b (a step S4).

[0080] It will be assumed that the display portion 11 is put into the lengthwise state where the display portion 11 is not rotated, as shown in FIG. 2A. The first magnetic sensor 111a detects this state to produce a magnetic nonrotation detected signal which is supplied to the rotation angle detecting portion 112. Responsive to the magnetic nonrotation directed signal, the rotation angle detecting portion 112 sends a nonrotation detected signal indicating that the display portion 11 is not rotated to the image processing circuit 115 and the camera input/output control circuit 116 (N in the step S1, N in the step S3). Responsive to the nonrotation detected signal, the image processing circuit 115 and the camera input/output control circuit 116 set the display mode into the mode c (a step S5).

[0081] Now, the description will proceed to examples of a switching of the camera portions where a user can set as the modes a-c and actual image displays in the display portion 11 in this event. It seems that there are, as the image displays, four image displays (camera modes, pickup modes) which will later be described. A first camera mode [1] is a mode for displaying a 3D image using the pair of front camera portions 17a and 17b. A second camera mode [2] is a mode for displaying a front image using only one of the front camera portions 17a and 17b. A third camera mode [3] is a mode for displaying a rear image using only the rear